



4U Compute Accelerator with GeForce GTX 1080 GPUs

The CA16007 Compute Accelerator with sixteen GeForce GTX 1080 GPUs is employed in a variety of HPC applications including deep learning, oil and gas exploration and financial services. Completely integrated with the GPUs most suited for a specific application, it's easy installation and tested reliability makes it superior to alternative products. The CA16007 occupies only 4U of rack space and connects directly to one or four host server(s) through the latest technology PCIe x16 Gen3 connections. Four removable canisters house up to four full-height, full-length, PCIe x16 double-wide GPUs each. The system is powered by three 3000-watt redundant power supplies and includes an IPMI-based system monitor.

PN: OSS-PCIe3-4U-16-4

Features

- 4U High
- Four removable canisters with four GPUs each
- Fully IPMI v2.0-compliant system monitoring capability
- Three 3000-watt power supplies
- Superior cooling with four temperature controlled fans
- Up to four PCIe x16 Gen3 cable connections to host server(s)



Specifications

Enclosure

- Dimensions: 17"W x 7" H x 38"D
- Supports 16 full-length, full-height, 2-slot PCIe x16 GPU/PHIs
- All 16 boards face the rear of the chassis (no IO bracket access)
- Removable front bezel with air filter
- Front panel LEDs
- Four rear panel PCIe x16 Gen3 cable interfaces
- 4 individually-removable rear fans and 4 canister mounted fans
- Weight: 92lbs when fully loaded with 16 accelerators

Main Backplane

- Four PCIe 3.0 x16 cable inputs to rear of enclosure
- Four PCIe 3.0 x16 high-density connectors to each canister
- Three PCIe 3.0 switches manage PCIe cross connects from cables to canisters
- 2x RJ45 connectors for IPMI v2.0 System Monitor
- 1x HD DB-9 serial port for IPMI network configuration
- Optional RJ45 for basic SYSMON2 chassis monitor (not required when using IPMI System Monitor)
- Supports bus-bar power distribution to the canisters through 8 high-power bladed connectors (2 per canister)
- On board IPMI System Monitor & SYSMON2 connectors

Canister Backplane

- 4x PCIe 3.0 x16 double-spaced slots in 2 ranks of 2 GPUs each
- 4x 8-Pin 12V power connectors for GPU/PHI AUX power cables
- PCIe 3.0 switch

Power

- 6000W redundant power subsystem
- Three 3U 3,000-watt front removable, hot-swap supplies
- Each supply measures 1U (1.65") x 2.7" x 28.5"
- 2+1 redundant with full current sharing operation
- 3,000W each at 208-277VAC, 15A max input
- 1,500W each at 90-124VAC, 15A max input
- 15A breaker and IEC C19 power input at rear for each supply
- +12V and +12V standby voltage outputs
- All +12V power rails shared on copper bus bar delivery system

Power Cords

- The HDCA ships with C19-C20 15A PDU type power cords
- 240V power cord for PDUs
 - o OSS Part number: OSS-CBL-PWR-C20-C19-15A-8
 - o IEC C19 to IEC C20, Straight, 14AWG, 15A, 8' (2.44m)
- Other power cords available on request

GeForce GTX 1080 GPU Specifications

Number of CUDA Cores	2560
Base Clock (MHz)	1607
Boost Clock (MHz)	1733
Memory Speed	10 Gbps
Standard Memory Config	8 GB
Memory Interface	GDDR5X
Memory Interface Width	256-bit
Memory Bandwidth (GB/sec)	320
GPU Power	180 W

Specifications subject to change without notice